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(12) United States Patent

Nilssen

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(54) ELECTRONIC BALLAST WITH OVER-VOLTAGE PROTECTION

(76) Inventor: Ole K. Nilssen, Caesar Dr., Barrington,

IL (US) 60010

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 1388 days.

(21) Appl. No.: 08/571,634

(22) Filed: Dec. 13, 1995

Related U.S. Application Data

(63) Continuation of application No. 08/236,125, filed on May 3, 1994, now abandoned, which is a continuation of application No. 07/579,569, filed on Sop. 10, 1990, now abandoned, which is a continuation-in-part of application No. 06/787, 692, filed on Oct. 15, 1985, now abandoned, which is a continuation of application No. 06/644,155, filed on Aug. 27, 1984, now abandoned, which is a continuation of application No. 06/555,426, filed on Nov. 23, 1983, now abandoned, which is a continuation of application No. 06/178, 107, filed on Aug. 14, 1980, now abandoned.

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(58) Field of Search 315/205, 53, 225, 209 R

(56) References Cited

U.S. PATENT DOCUMENTS

3,733,541 * 5/1973 Elms 315/205 X

4,005,335	•	1/1977	Perper	315/224
4,045,711	•	8/1977	Pitel	315/209 R
4,244,013	*	1/1981	Wotowiec	362/216
4,270,071	*	5/1981	Morton	315/53 X
4,298,822	*	11/1981	Fukuda	313/493
4,337,414	•	6/1982	Young	315/56

OTHER PUBLICATIONS

"Conversion of Incandescent Lamp Sockets to Flourescent in the Home Market" by E.A. Dale et al., Lighting & Design Appl., Mar. 1976, pp. 18–23.*

* cited by examiner

Primary Examiner—Arnold Kinkcad

57) ABSTRACT

In an electronic ballast, a rapid start fluorescent lamp is powered by being parallel-connected with the tank-capacitor of a series-resonant LC circuit. Beating power for the lamp's cathodes is obtained by way of loosely-coupled auxiliary windings on the tank inductor of the LC circuit. In case the fluorescent lamp were to be disconnected or otherwise were to fail to properly load the series-resonant LC circuit, due to so-called Q-multiplication, the magnitude of the voltage develped across the tank-capacitor would normally increase to a high and potentially destructive level. However, due to feedback operable to cause the inverter frequency to increase as a function of the magnitude of the voltage across the tank-capacitor, the magnitude of this tank-capacitor voltage is limited to a level substantially lower than what otherwise would be the case.

17 Claims, 3 Drawing Sheets



